

# Faba bean - notes and NVT entries 2016

September 2016

## Notes on main varieties and lines

**Cairo.** Released in 2003 and was the main variety in northern NSW prior to the release of Doza. Improved yield, frost tolerance, rust resistance and seed quality as compared to Fiord. Since its release it appears that Cairo has partly lost its rust resistance, possibly because of high inoculum pressure. Medium maturity, medium seed size, vigorous early growth, susceptible to *Ascochyta* blight making it unsuitable for southern areas.

**Doza.** Released in 2008 for the northern region. Earlier flowering than all existing varieties and therefore better adapted to the lower rainfall zones in the north. Better than Cairo for yield, rust and chocolate spot resistance, seed colour and seed size uniformity, but similar for frost. Seed size averages approximately 90% of Cairo. Doza has been extensively planted since 2010 but has now been replaced by PBA Warda. Commercialised by Seednet.

**Farah.** Selected from Fiesta for *Ascochyta* blight resistance and well adapted in the Southern Region. Slightly later maturity than Fiesta. Farah is very similar to Fiesta in most respects but with improved *Ascochyta* resistance and more uniform seed characteristics. The *Ascochyta* resistance of Farah has been overcome by a new pathotype of *Ascochyta fabae* in the mid-north of South Australia. Farah is not recommended for northern NSW due to its susceptibility to rust and frost, compared to Cairo and Doza. Commercialised by Heritage Seeds.

**Fiesta VF.** A variety selected for southern areas where it has shown good adaptation to a wide range of environments. Medium seed size aimed at higher value human consumption markets. Medium maturity, susceptible to rust and chocolate spot, good early vigour.

Fiesta was the major variety in the Southern Region following its release in 1997, but is being superseded by varieties with improved disease resistance and more uniform seed characteristics. Fiesta is not recommended for northern NSW due to its susceptibility to rust and frost, compared to Cairo and Doza.

**Nura.** A variety for the Southern Region where it displays good yield potential, disease resistance and good seed quality. Slow early growth and very late flowering. Nura is not adapted to northern areas due to late flowering and maturity. It is more resistant to chocolate spot and rust than Fiesta and Farah, and similar *Ascochyta* resistance to Farah. Nura is a shorter plant, with better standing ability than Fiesta and Farah, although will still lodge under extreme conditions. It is a later flowering type and best yields are obtained when sown early. Commercialised by Seednet.



**PBA Nasma.** Released in spring 2015. A new variety for northern NSW and southern Queensland with higher yield than PBA Warda. Its larger and more uniform seed than Cairo and PBA Warda will make it readily acceptable into the human consumption market. Its flowering and maturity time is similar to PBA Warda. PBA Nasma is similar to PBA Warda for resistance to chocolate spot and tolerance to frost and *Bean leafroll virus*. Its rust resistance is slightly inferior to Doza, but far superior to Cairo. Commercialised by Seednet.

**PBA Rana.** Released in 2011. Best adaption in the high rainfall, long growing seasons of the Southern Region, and not suited to short season environments or the Northern Region. Medium to large seed, about 20% larger than Fiesta and Farah and well suited to the Middle East market. PBA Rana has a greater level of resistance to *Ascochyta* blight and chocolate spot than Nura and Farah, and is moderately susceptible to rust. Vigorous early growth and good stem strength and standing ability, although could lodge under very high biomass situations. Commercialised by Seednet.

**PBA Samira.** Released in 2014. Selected for the southern region where it has shown wide adaptation. Very high yield potential. It is resistant to *Ascochyta* blight, and less susceptible to both chocolate spot and rust than Fiesta VF and Farah. It flowers at the same time as Nura and PBA Rana and matures at the same time as Fiesta VF and Farah. Reduced number of early stems and good standing ability. Seed is the same colour and slightly larger than Fiesta VF and Farah and should be acceptable to co-mingle with other varieties for the Middle East market

**PBA Warda.** Released in 2012 for the northern region with higher yield and bigger seed than Doza. Best adapted to eastern areas with higher rainfall. Similar to Doza for earliness, chocolate spot and rust resistance, but has better tolerance to *Bean leafroll virus* and vegetative frost damage. Its seed is more uniform and bigger than Doza making it suitable for the human food market. Commercialised by Seednet.

**PBA Zahra.** Released in spring 2015. A variety selected for the southern region where it has shown very high yield potential, and is particularly responsive to high yielding situations. It is resistant to *Ascochyta* blight in most districts in the southern region, although MS/MR to a new pathotype in the Mid North of South Australia. It is less susceptible to chocolate spot and rust than Fiesta and Farah. PBA Zahra flowers at the same time as Nura and PBA Samira, but can mature slightly later if seasonal conditions are conducive. It has large plump seed, similar in size to PBA Rana, and the two varieties could be co-mingled for a large seeded category in the Middle East market. Commercialised by Seednet.

### Notes on disease control

While the newly released varieties have steadily improved disease resistance, none have complete resistance to rust, chocolate spot or *Ascochyta* blight. In a disease favourable environment (because of frequent rain or high inoculum) yield losses will occur. Growers are therefore advised to adhere to the disease management package and apply a fungicide spray earlier in the season. This early spray can control the establishment of disease inoculum in the

paddock and will therefore have a season-lasting effect. Crops of Farah should be monitored carefully for the presence of *Ascochyta* blight. A new pathotype of *Ascochyta fabae* emerged in the Mid North region of South Australia in 2013 and has overcome the resistance of Farah. This new pathotype has not been reported in NSW, to date, but growers of Farah should be vigilant. Nura and PBA Samira remain resistant while PBA Rana and PBA Zahra are MS/MR to the new pathotype.

### Faba bean variety performance 2008–2015 Northern NSW

Variety	Yield (trial no.)	
	NE % Cairo 2.78 t/ha	NW % Cairo 2.16 t/ha
Cairo	100 (29)	100 (48)
Doza	105 (29)	104 (48)
Fiesta VF	101 (17)	100 (25)
PBA Nasma	112 (28)	110 (46)
PBA Warda	100 (30)	108 (49)

### Faba bean variety performance 2008–2015 Southern NSW

Variety	Yield (trial no.)	
	SE % Farah 2.82 t/ha	SW (Irrigated) % Farah 4.20 t/ha
Doza	93 (16)	95 (3)
Farah	100 (31)	100 (9)
Fiesta VF	101 (31)	100 (9)
Nura	97 (31)	95 (9)
PBA Rana	106 (6)	94 (9)
PBA Samira	95 (31)	101 (5)
PBA Warda	98 (15)	102 (4)
PBA Zahra	106 (16)	101 (5)

Note: Yields are a combined across sites analysis using NVT and PBA data.

### More information

Jeff Paull, Breeder, University of Adelaide, Adelaide, 08 8313 6564; Kedar Adhikari, Breeder, University of Sydney, PBI, Narrabri, 02 6799 2231

### Acknowledgments

Don McCaffery, Technical Specialist (Pulses and Oilseeds), NSW DPI, Orange; Leigh Jenkins, Research and Development Agronomist, NSW DPI, Trangie

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